

H.A

**Notice of Allowability**

Application No.

10/604,657

Applicant(s)

HOUSE ET AL.

Examiner

Edward Raymond

Art Unit

2857

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 9/2/05.
2. ☒ The allowed claim(s) is/are 1-9, 16-23, 36-41 and 57-59.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20050915</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                          |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____.                                                                     |

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Siverio on September 15, 2005.

The application has been amended as follows:

Replace the text in **claim 1** with the following:

"1. A machine life indicating system, comprising:

means for receiving historical data, the historical data providing an indication of the operating lifetime of major components within machines of a particular type;

means for calculating the life remaining in a machine using, the historical data and the L<sub>10</sub> life calculation, wherein the L<sub>10</sub> life calculation comprises the load factor rating and the rotational speed of the machine; and

means for displaying the life remaining in the machine."

**Claims 13 and 14** are cancelled.

Replace the text in **claim 16** with the following:

"16. A machine life indicating system, comprising: means for receiving operator input data, the operator input data providing information specific to the operation history of a machine; means for calculating the life remaining in the machine using the operator

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input data, wherein the means for calculating the life remaining in the machine comprises means for calculating the life remaining in the machine using historical data and an  $L_{10}$  life calculation; and means for displaying the life remaining in the machine.”

Replace the text in **claim 19** with the following:

“19. The system of claim 1, wherein the means for calculating the life remaining in the machine using probability distribution functions comprises means for calculating the life remaining in the machine using probability distribution functions for individual components within the machine.

Replace the text in **claim 20** with the following:

“20. The system of claim 1, wherein the machine is selected from the group of machines consisting of a transformer, a wind turbine, an electric motor, and a generator.

Replace the text in **claim 21** with the following:

“21. The system of claim 1, wherein the means for receiving operator input data is operable to receive the operator input data such that the operator input data is not continuously received by the means for receiving.

Replace the text in **claim 22** with the following:

“22. The system of claim 1, wherein the machine is within a class of machines defined by the machines of the particular type.”

Replace the text in **claim 23** with the following:

“23. The system of claim 1, wherein the means for calculating the life remaining in a machine comprises means for calculating the life remaining in the machine based on the life remaining in at least one component within the machine.”

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Replace the text in **claim 57** with the following:

“57. A machine life indicating system, comprising; an assessment tool operable to receive operator input data, the operator input data providing information specific to the operation history of a machine, wherein the assessment tool is operable to calculate the life remaining in the machine using historical data and an L<sub>10</sub> life calculation; an analysis application, in communication with the assessment tool, the analysis application operable to calculate the life remaining in the machine using, at least in part, the operator input data; and a display for displaying the life remaining in the machine.”

***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance: Talbott teaches a condition based prognosis for machines. The prior art does not teach means for calculating the life remaining in a machine using, the historical data and the L<sub>10</sub> life calculation, wherein the L<sub>10</sub> life calculation comprises the load factor rating and the rotational speed of the machine.

The prior art of record does not teach calculating the life remaining in the machine based at least in part on the insulation class or insulation resistance test class of the machine.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Contact Information***

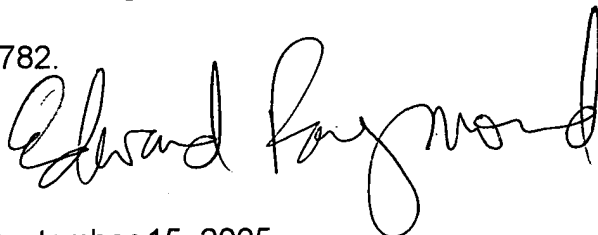
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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Raymond whose telephone number is 571-272-2221. The examiner can normally be reached on Monday through alternating Friday between 8:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-2221 for regular communications and 571-272-1562 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

1782.

A handwritten signature in black ink that reads "Edward Raymond". The signature is written in a cursive, flowing style with a large, prominent loop at the end of the last name.

September 15, 2005  
Edward Raymond  
Patent Examiner  
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